

WHAT IS CLAIMED IS:

1 1. A nucleic acid array, wherein each coordinate of the array contains
2 a single nucleic acid species, which nucleic acid species has a sequence of a *Xenopus*
3 embryonic gene product set forth in Appendix 1, or the complement thereof, or a
4 hybridizable fragment thereof consisting of not less than 20 contiguous nucleotides from
5 the sequence.

1 2. The nucleic array of claim 1 comprising all of the sequences from
2 Appendix 1.

1 3. The nucleic acid array of claim 1 wherein the nucleic acids are
2 cDNAs.

1 4. The nucleic acid array of claim 1 wherein the nucleic acids are
2 oligonucleotides.

1 5. The nucleic acid array of claim 1, wherein the array is supported
2 on a solid support selected from the group consisting of a glass slide and a silicon chip.
3

4 6. An isolated nucleic acid comprising a sequence corresponding to
5 or complementary to a sequence of not less than 20 contiguous nucleotides of any one of
6 the sequences of Appendix 1.

1 7. The nucleic acid of claim 6 wherein the sequence consists of the
2 sequence of Appendix 1, or the complement thereof.

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1 24. Method for detecting defects in development, which method
2 comprises contacting nucleic acids from test cells undergoing development with a nucleic
3 acid array of gene products known to play a fundamental role in the development process,
4 and detecting a difference in expression of a fundamental gene in the sample cells relative
5 to a standard.

1 25. The method according to claim 24, wherein the standard is a
2 standard derived from expression in a normal cell.

1 26. The method according to claim 24, wherein the nucleic acid array
2 comprises one or more sequences as set forth in Appendix 1, or the complement thereof,
 or a hybridizable fragment thereof.

1 27. The method according to claim 24, wherein a difference in gene
2 expression in test cells relative to normal cells is indicative of a developmental defect.